STANDARD OPERATING PROCEDURES (SOP)
FOR
THE COAST GUARD'S TRAINING SYSTEM

Volume 8

Non-Instructional Performance Support

Training Division
Force Readiness Command

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Section 1: Introduction to Non-Instructional Performance Support

Introduction

Volume 2 of the Training System SOP (Analysis) presented the various types of analyses conducted for providing detailed and comprehensive information to Program Managers, Training Managers, and Acquisition Managers to facilitate informed decisions regarding the deployment of financial, personnel, and materiel resources. The organizational tasking and communications process that accompanies Program requests for analysis (RFA), funding, and plans of action, milestones, and other issues concerning Front End Analysis (FEA), Job Task Analysis (JTA), and Occupational Analysis (OA), among others, were discussed and reviewed.

The intent of the types of analyses discussed in Volume 2 was to identify both instructional performance support components and non-instructional support components of the larger Coast Guard performance system. The instructional components are developed specifically to target areas for improvement based in skills and knowledge gaps identified via the analysis. Volume 2, did not attempt a comprehensive discussion of Non-Instructional Performance Support which is equally as important when considering how job performances are assessed and analyzed in the Coast Guard training system.

Overview

This Volume of the Training System SOP discusses Non-Instructional Performance Support. It is important to understand the significance of what NIPS means and how it fits into the broader category of Performance Technology and creating a fully integrated performance system.

Dr. Thomas Gilbert predicts in his Behavior Engineering Model (BEM) and Dr. Joe Harless describes in his Front-End Analysis (FEA) methodology fundamental truths — the cheapest and most direct way to influence positive performance is through the application of NIPS interventions and the creation of an integrated performance system.

This is not to say that training for skill and knowledge factors is not critically important. It is. But, research and experience have shown that training is only a part of the performance solution and, if the non-instructional performance solutions are ignored, there is little chance of optimizing job-site performance as it relates to mission execution.

Thus, this Volume of the SOP and Volume 2 (Analysis) can be considered as inter-dependent, a two-tiered system to ensure analysis and its subsequent recommendations are comprehensive, detailed, and providing sufficient guidance to the target audience. These considerations are critical, when conducting analysis to determine appropriate interventions to recommend to ultimately improve job performance in the Coast Guard.

Non-instructional Performance Support

As suggested in the Overview, NIPS interventions are intended to deal with "the rest of the performance story." NIPS are critical success elements that must be considered if optimizing job-site performance and mission execution are serious objectives.

Behavior Engineering Model

Gilbert's Behavior Engineering Model (BEM), below, illustrates the kinds of questions that must be considered when interviewing/surveying performers to determine what kinds of performance support will be necessary to create an integrated system (of both instructional and NIPS components).

Behavior Engineering Model

	Information	Instrumentation	Motivation
The Environment	**1. DATA:** Does the performer have clear and relevant doctrine, instructions, and technical manuals that clearly describe what constitutes exemplary job-site performance and does he/she receive feedback when task is performed correctly?	**2. RESOURCES:** Does the performer have all relevant tools, resources, time, and materials of work designed to match job-site performance requirements?	**3. INCENTIVES:** Are all factors in place to ensure that the performer is attending to the right tasks, that they are relevant to the mission, that he/she is confident in ability to perform, and that he/she will be satisfied with results?
The Individual	**4. KNOWLEDGE:** Does the performer possess the required skill and knowledge to perform specific job-site tasks?	**5. CAPACITY** Does the performer have the personal capacity to perform the tasks required for job-site performance?	**6. MOTIVES:** Does the performer willingly desire to perform the job-site tasks in the manner specified?

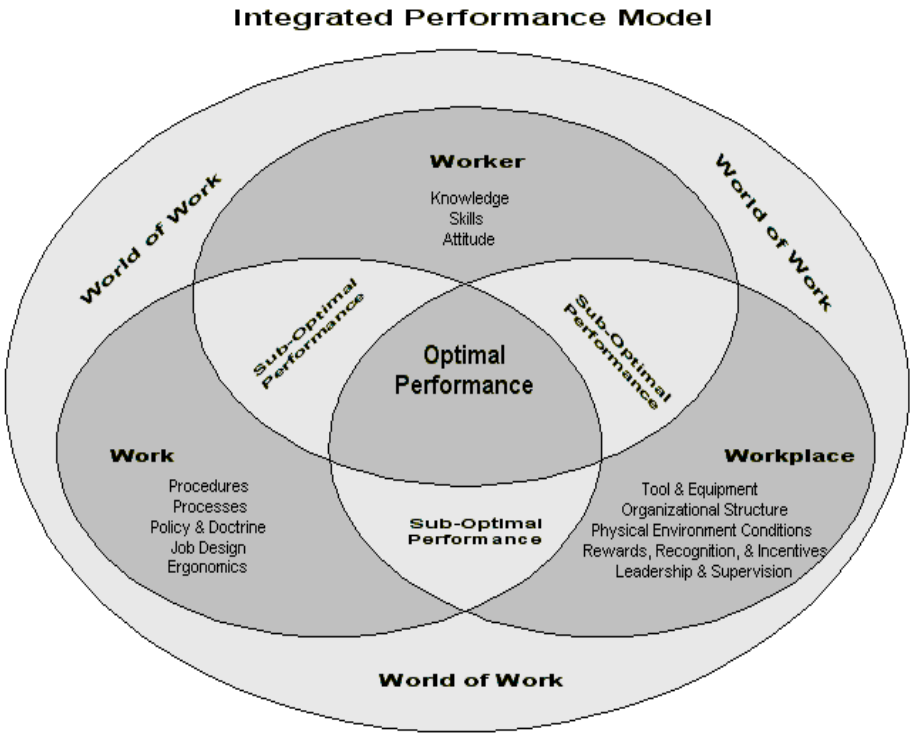
The top row of the model above the influences of (data, resources, and incentives) are primarily a factor of the environment in which the worker performs and are under the control of the organizational control (i.e., Coast Guard organization). The bottom row of influences (knowledge, capacity, and motives) are factors pertaining to the individual and are products of his or her control.

NIPS includes the factors listed in the top row of the BEM, and are intended to assist or supplement the worker in doing his/her job, or, may create barriers to optimal performance. If the instructional and non-instructional systems are working together properly, a balanced and harmonious system exists and organizational goals will be achieved with seemingly effortless efficiency and effectiveness.

Worker, Work, and Workplace

The diagram below, introduced in Volume 2, represents the optimum, balanced state when balance and harmony are achieved among worker, work, and workplace. Note that the model also depicts the "sub-optimized performance" state when mission effectiveness is compromised due to sub-system failures or by organizational oversights.

Diagram 1: Worker, Work, and Workplace



An examination of the influences contained in this model that directly affect Optimal Performance suggests that there are Work Influences (procedures, processes, policy and doctrine, etc.); Workplace Influences (tools and equipment, the organizational structure, and rewards, recognition, and incentives, etc.); and Worker Influences (knowledge, skills, and attitude). NIPS targets specific influences from each of the areas that are not under the primary control of the performer, but still have significant impact in his or her opportunity to get the job done.

The Wheel of Performance

The Wheel of Performance graphically organizes many performance factors in a manner to emphasize the fundamental principle that training is only one of many factors that impact job-site performance outcomes. The critical point described by this graphic is that job performance is influenced by many more things than just skill and knowledge factors of the workers.

Diagram 2: The Wheel of Performance

Definition

NIPS is the convergence of external environmental factors, successfully engineered to ensure optimal job-site performance when combined with human performers.

The term NIPS is negatively constructed to define what it is *not* because many people make the incorrect assumption that training by definition ensures performance. It does not. Non-instructional Performance Support, provides the foundation of support for people to perform their jobs in an exemplary manner. Shortcomings or problems with motivation, tools, capacity, and leadership, if not comprehensively addressed, will negatively influence job performances. If NIPShas not been adequately prepared to support human performers in their efforts, then job performance will suffer and mission execution will be less efficient and/or less effective.

General Performance Categories

The following table succinctly captures the fundamental classifications of influencing factors and the category of performance support that applies.

Classification	Performance Support
Skills and Knowledge	Instructional
Environment	Non-Instructional
Motivation and Incentive	Non-Instructional
Personnel Selection and Assignment	Non-Instructional

Example 1

Every job, ultimately, is a blending of performance factors to a lesser or greater extent.

It is easy to see how the converging factors in an aircraft where the air crew and the aircraft work within a well-balanced system of equally important sub-systems that contribute to perform the mission. Within that system of systems, human error can lead to catastrophic consequences. However, so can lack of oil pressure or a loss of cabin air pressure. These problems may have roots in outdated maintenance procedures, or insufficient manpower to complete routine maintenance on time, or any number of other contributing factors.

Example 2

Not so easy to see, and, indeed, where a high level of concern exists, are jobs where failure is not so dramatic, but may be equally impactful in mission accomplishment—even if the impact is hidden from view.

An office worker, for example, experiences significant barriers to job execution if he/she works in an unfavorable office environment or the policy and procedures no longer fit the circumstances, or the computer applications are inadequate for the task. And, while the office building doesn't fall out of the sky if failure occurs, the accomplishment of mission of that organization suffers and important tasks are significantly impaired and are not accomplished effectively or efficiently. This, of course, can lead to a costly waste of time, money, and effort, and may significantly impede the performance of other organizational elements.

Section 2: Implementation Process

Overview

Once the analysis has established the need for a NIPS intervention, the FC-51 Project Lead will develop a Plan of Action and Milestones (POAM) working with the appropriate stakeholders. In some situations, the stakeholder will be the Program Sponsor. In other situations, it will include the Acquisition Project Manager.

Note: It is important to delineate whether there are a set of assumptions and constraints to the project which must be considered, discussed, and documented, to alleviate confusion about how the process of identifying solutions for performance gaps has been conducted. For instance, if funding is an immediately recognizable issue, it must be documented clearly in communications documents to stakeholders awaiting recommendations following your analysis, so that recommendations presented make sense, and reside within the parameters initially set for the project.

High-level Events

There are five high-level events that must be included in the NIPSproject plan:

Event	Function
Analyze	The analysis must be conducted prior to planning any specific intervention to ensure that optimal state and actual state determinations are accurate and appropriate.
Plan	Creating a Project Plan ensures that all stakeholders are part of the process and appropriate buy-in is achieved. Additionally, funding sources will have been identified.
Select	Selecting the most qualified, effective, and available resource to implement the plan is critical to cost, schedule, and performance considerations.
Implement	Implementation in accordance with the Project POAM is essential to receiving quality results on time.
Evaluate	Conducting a post-implementation Level 3/4 evaluation is key to ensuring mission success beyond initial execution.

Process

The intervention implementation process may look linear, but it is iterative and some steps may be completed simultaneously by different groups of people. For instance, a communication strategy may be completed at the same time you are arranging for resources. The most important thing is to complete each step to ensure successful implementation of the NIPS.

Implementation Job Aid

Use the following guidelines (job aid) when planning to implement a non-instructional performance solution

<table>
<tr><th>Step</th><th>Action</th></tr>
<tr><td>1</td><td>Review and align POAM with FEA analysis outbrief recommendations.</td></tr>
<tr><td>2</td><td>Assess NIPS intervention(s) for implementation feasibility. Some solutions are easy to accomplish and require only minimal effort. Other interventions may require long-term planning, additional analysis, and additional funding resources.</td></tr>
<tr><td>3</td><td>Define the parameters of the intervention(s).</td></tr>
<tr><td>4</td><td>Describe the target population for the intervention:

<table><tr><th>Step</th><th>Category</th></tr><tr><td>1</td><td>Demographic data</td></tr><tr><td>2</td><td>Environmental data</td></tr><tr><td>3</td><td>Motivation / incentives</td></tr><tr><td>4</td><td>Manpower factors</td></tr><tr><td>5</td><td>Personnel selection factors</td></tr><tr><td>6</td><td>Personnel assignment factors</td></tr><tr><td>7</td><td>Organization hierarchy</td></tr></table></td></tr>
<tr><td>5</td><td>Assess political climate/factors (as necessary).</td></tr>
<tr><td>6</td><td>Assess resource availability.</td></tr>
<tr><td>7</td><td>Determine program readiness.</td></tr>
<tr><td>8</td><td>Review for timeliness of delivery.</td></tr>
<tr><td>9</td><td>Compare costs, benefits and return on investment.</td></tr>
<tr><td>10</td><td>Define process of how success will be measured and by whom.</td></tr>
<tr><td>11</td><td>Create Project Implementation Plan.</td></tr>
<tr><td>12</td><td>Arrange for resources.</td></tr>
<tr><td>13</td><td>Create implementation schedule.</td></tr>
<tr><td>14</td><td>Create communication plan.</td></tr>
<tr><td>15</td><td>Implement NIPS as per POAM.</td></tr>
<tr><td>16</td><td>Evaluate effectiveness with Level 3 analysis, cost benefit analysis and ROI if needed.</td></tr>
<tr><td>17</td><td>Make changes to interventions as dictated by evaluation results.</td></tr>
<tr><td>18</td><td>Implement continuous improvement program.</td></tr>
</table>

Step 4 of the Job Aid

Step 4 of the job aid provides categories for description, which will, in turn, point your efforts toward defining, assessing, and documenting the characteristics of Workplace Influences.

These performance support interventions are categorized according to the performance categories discussed earlier:

- Environmental
- Motivation and Incentives
- Personnel Selection and Assignment
- Skill and knowledge

Note: These four categories are taken from the Harless FEA model (the Coast Guard's approved methodology). These four categories subsume all of the six categories in Gilbert's BEM as well as Carl Binder's Six Boxes model. Although the three models may use slightly different terminology, they are essentially the same approach.

Identifying and describing this data for the design of interventions is critical component in the process of designing interventions following analysis. The following steps provide guidance on how to move forward toward a recommendation or solution.

How to turn action items into Plan of Action

Step 1: Once the analysis is completed, a set of action items, or recommendations is presented to the Program Sponsor during an outbrief session. At this point, it is the responsibility of FC-51 to work directly with the sponsor to create a Plan of Action and Milestones (POAM) and to facilitate an orderly accomplishment of the action items.

Step 2: Additionally, an internal readiness assessment must be conducted to determine the readiness of the Program Sponsor to move forward into the implementation phase. While there are many factors that contribute to the readiness posture and each situation is different, the key success factors are resource issues: funding and capacity.

Step 3: Refine the elements of the POAM to be consistent with the results of the readiness assessment. Program Sponsors that have adequate funding, direct control of their resources, and the capacity to redirect personnel to staff the project will find that their action items will be implemented quickly. Conversely, Program Sponsors who lack funds and resources must develop a more systematic and multi-year approach to implementing the action items.

The POAM is the vehicle used to implement the recommended action items and to create an integrated performance system as described in Diagram 1. Since this process is variable and may take several years to accomplish, it is the responsibility of FC-51 to initiate and manage this process thoroughly, to ensure the development and maintenance of a successful integrated performance system for the Coast Guard.

NIPS Selection Process and Rationale

The following examples show how the analyst and program sponsor can interpret fact-data gathered from interviews and surveys and create actionable findings and recommendations. These recommendations will become the basis for the post-FEA POAM.

If facts from FEA data suggest	Category is…	And findings will state	Then possible IPS recommendation and POAM action item is…
Multiple mishaps occur when 2" hitches disengage from 1 ½" balls.	Environmental	Performers frequently do not visually recognize the difference between 2" balls and 1 ½" balls	Prepare a COMDINST or ALCOAST to require all trailer hitches to be color coded blue and yellow respectively.
Performers are frequently required to work 12 or 24-hour shifts.	Environmental Personnel selection and/or assignment	Watch sections are routinely short workers due to insufficient staff during peak work season, gaps in assignment process, or scope of work creep creates increased demands	Initiate a Manpower Requirements Analysis or Staffing Standards analysis be conducted to determine actual requirements. Review personnel assignment policy.
Difficult or unsafe worksite conditions identified as barrier to exemplary performance by 62% of survey respondents.	Environmental	Unsafe and demanding worksite conditions reduce efficiency and effectiveness of performance	Initiate a formal review of job-site conditions by certified safety engineer or possibly human factors engineer.
Performers report that policy, procedures, and practices do not exist, are vague, or out of date.	Environmental	Formal documentation does not provide clear and accurate job-site performance	Review existing documentation and initiate plan for revision and rewrite of document.

Additional guidelines and examples to provide guidance and insight.

If facts from FEA data suggest…	Category is…	And findings will state…	Then possible IPS recommendations and POAM action items may be…
Training center instructors are not using performance-based instructional methods in the classroom.	Motivation and Incentives	Key instructor personnel are resistant to using performance-based instructional methods	Develop a change management plan to demonstrate and persuade key personnel. Provide incentives for compliance.
Key decisions are not made to implement new programs.	Motivation and Incentives	Competing organizational elements have overlapping authority and responsibility	Initiate an organizational redesign.
Personnel are routinely under-performing at the job-site despite training.	Personnel Selection	Pre-requisite qualifying scores are set to low to consistently provide personnel with the capacity to perform	Create a multi-disciplinary working group to assess actual requirements and consider aligning with actual requirements.
Numerous mishaps have been reported due to improper use of key navigational equipment.	Skills and Knowledge	Key personnel have not been adequately trained how to operate the new radar	Determine the best mix of possible training solutions and implement a design and development project as necessary.

As described in these examples, Non-Instructional Performance Support interventions have been recommended to target shortcomings and/or problems with motivation, tools, and capacity, to enhance the entire Integrated Performance System, and provide a foundation of support for people to perform their jobs in an exemplary manner.

Conclusion

Goals of this SOP Volume

This Volume of the Training System SOP has addressed the following fundamental concepts regarding Non-Instructional Performance Support:

1. To describe the theoretical elements of performance technology that lead to the selection of NIPS interventions.
2. To emphasize that considering both instructional solutions and NIPS interventions is not only advisable, but, in fact, mandatory, when conducting analysis to determine appropriate interventions to recommend to ultimately improve job performance in the Coast Guard.
3. To describe the steps to follow to implement action items via a POAM and communication with various decision making units (e.g., FC-51).
4. To provide examples showing a direct linkage of FEA fact-data results with a total integrated performance system, including performance enhancing factors that are not skill and knowledge training.

Note: This Volume is not intended to be a comprehensive compendium of non-instructional interventions. The list of possibilities is too great and it is constantly changing with new technologies and new methods rendering previously identified and developed solutions outdated. It is important to determine whether state-of-the-art technology has a greater potential for improving the strength of the NIPS solution; if not, the use of basic, traditional, proven tools and methods is recommended.

Section I builds a strong case for looking at what goes on in the workplace as interrelated systems combine to support or hinder the overall outcomes. What makes this difficult to see sometimes is the creative energy that workers apply to create “work-a-rounds” This serves to hide the impact of dysfunctional systems, but cannot diminish the effects of elements that create barriers to efficient and effective performance.

Section II provides clear and unambiguous guidance on how to use the action item recommendation in the FEA to create a Plan of Action and Milestones. It also highlights the need to determine the readiness of the program sponsor to move forward with actionable recommendations.

Section II also revisits the notion of an Integrated Performance System (a system of systems) in a more direct manner and establishes the link between the elements of the POAM and the readiness of the sponsor. This is important because historical evidence suggests that implementation of the FEA action items is a hilt-or-miss proposition and that some program sponsors need greater assistance in creating an IPS. The responsibility for making this happen clearly belongs to the Office of Performance, Training, and Education (FC-51).

Section II also provides a job aid that establishes guidelines for linking the FEA raw data and findings to actionable recommendations. This is an important feature because many times the program sponsor has pre-conceived ideas of what interventions are necessary; but are not necessarily supported by the data gathered. The process described by the job aid provides irrefutable evidence of what actions will contribute to an efficient and effective performance system.

The conclusion section provides a summary of the goals of the SOP and a brief recapitulation of the precepts of each preceding section. The Conclusion section provides the unambiguous criteria by which to judge the success of non-instructional performance systems solutions.
